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Date 2/23/07 Serial # 091849,537 Priority Application Date 5/7/01  
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Claims 13, 16, 17, 52, 59, & 69-71

BGA & Heat Spreader

Problem: See pages 2 & 3  
Solution: 1, 1, 3 & 4

2008/0079579  
6,583,513

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Set	Items	Description
S1	716	AU='ZHAO, S' FROM 2, 6, 8, 14, 25, 31, 33, 34, 35, 36, 46, 56, 57, 60, 61, 63, 64, 65, 68, 81, 87, 94, 95, 96, 99, 103, 104, 118, 134, 144, 239, 240, 248, 293, 315, 323, 335, 434, 23
S2	2	AU='ZHAO, SAM Z.':AU='ZHAO, SAM ZIQUN' FROM 2, 6, 8, 14, 25, 31, 33, 34, 35, 36, 46, 56, 57, 60, 61, 63, 64, 65, 68, 81, 87, 94, 95, 96, 99, 103, 104, 118, 134, 144, 239, 240, 248, 293, 315, 323, 335, 434, 23
S3	1	AU='ZHAO SAM Z' FROM 2, 6, 8, 14, 25, 31, 33, 34, 35, 36, 46, 56, 57, 60, 61, 63, 64, 65, 68, 81, 87, 94, 95, 96, 99, 103, 104, 118, 134, 144, 239, 240, 248, 293, 315, 323, 335, 434, 23
S4	1113	AU='ZHAO S' FROM 2, 6, 8, 14, 25, 31, 33, 34, 35, 36, 46, 56, 57, 60, 61, 63, 64, 65, 68, 81, 87, 94, 95, 96, 99, 103, 104, 118, 134, 144, 239, 240, 248, 293, 315, 323, 335, 434, 23
S5	6	AU='BACHER, B.':AU='BACHER, BRENT' FROM 2, 6, 8, 14, 25, 31, 33, 34, 35, 36, 46, 56, 57, 60, 61, 63, 64, 65, 68, 81, 87, 94, 95, 96, 99, 103, 104, 118, 134, 144, 239, 240, 248, 293, 315, 323, 335, 434, 23
S6	13	AU='BACHER B':AU='BACHER B J' FROM 2, 6, 8, 14, 25, 31, 33, 34, 35, 36, 46, 56, 57, 60, 61, 63, 64, 65, 68, 81, 87, 94, 95, 96, 99, 103, 104, 118, 134, 144, 239, 240, 248, 293, 315, 323, 335, 434, 23

S7           6    AU='UTAGIKAR A':AU='UTAGIKAR, A.' FROM 2, 6, 8, 14, 25, 31,  
 33, 34, 35, 36, 46, 56, 57, 60, 61, 63, 64, 65, 68, 81, 87, 94, 95, 96, 99,  
 103, 104, 118, 134, 144, 239, 240, 248, 293, 315, 323, 335, 434, 23  
 S8           2    AU='CHONG NUM KWEE' FROM 2, 6, 8, 14, 25, 31, 33, 34, 35, 36,  
 46, 56, 57, 60, 61, 63, 64, 65, 68, 81, 87, 94, 95, 96, 99, 103, 104, 118,  
 134, 144, 239, 240, 248, 293, 315, 323, 335, 434, 23  
 S9           52   AU='CHONG N' OR AU='CHONG N K' FROM 2, 6, 8, 14, 25, 31, 33,  
 34, 35, 36, 46, 56, 57, 60, 61, 63, 64, 65, 68, 81, 87, 94, 95, 96, 99, 103,  
 104, 118, 134, 144, 239, 240, 248, 293, 315, 323, 335, 434, 23  
 S10          68   AU='CHONG, N' OR AU='CHONG, N.' FROM 2, 6, 8, 14, 25, 31, 33,  
 34, 35, 36, 46, 56, 57, 60, 61, 63, 64, 65, 68, 81, 87, 94, 95, 96, 99, 103,  
 104, 118, 134, 144, 239, 240, 248, 293, 315, 323, 335, 434, 23  
 S11          17   S S2:S3 OR S5 OR S7:S8  
 S12          12   RD (unique items)  
 S13         1976   S S1:S10  
 S14          1    S S13 AND (FLIP () CHIP OR SOLDER)



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L3	112	2 and heat adj spread\$3	EPO; JPO; DERWENT	OR	ON	2007/03/01 15:20
L4	208	(ball adj grid bga) and heat adj spread\$3	EPO; JPO; DERWENT	OR	ON	2007/03/01 15:49
L5	171	4 not 3	EPO; JPO; DERWENT	OR	ON	2007/03/01 16:30
L6	680	(ball adj grid bga flip adj chip) and heat adj (slug dissipat\$4)	EPO; JPO; DERWENT	OR	ON	2007/03/01 15:50
L7	26	(ball adj grid bga flip adj chip) and heat adj slug	EPO; JPO; DERWENT	OR	ON	2007/03/01 15:50
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L9	231	(ball adj grid bga flip adj chip) and stiffener	EPO; JPO; DERWENT	OR	ON	2007/03/01 15:51
L10	13	6 and stiffener	EPO; JPO; DERWENT	OR	ON	2007/03/01 15:51
L11	34	5 and (stiffen\$3 stiff rigid\$3 planar\$3)	EPO; JPO; DERWENT	OR	ON	2007/03/01 16:31
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